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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/453,525	12/03/1999	TATSUZO HASEGAWA	Q56957	2758

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EXAMINER

GRAHAM, ANDREW R

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 09/453,525	<b>Applicant(s)</b> HASEGAWA ET AL.	
	<b>Examiner</b> Andrew Graham	<b>Art Unit</b> 2644	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 14 October 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: \_\_\_\_\_.  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached response.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
 13. ☐ Other: \_\_\_\_\_.



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SUPERVISORY PATENT EXAMINER

  
 Andrew Graham  
 571-272-7517

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***Response to Arguments***

Applicant's arguments filed 10/14/05 have been fully considered but they are not persuasive.

On page 3, lines 1-4, the applicant has stated, "the circuit disclosed in Grosjean fails to mute input signals, in a manner as recited in claim 9, due to the provision of the AC filter 29 (which the Examiner calls the "interconnection") which shunts the AC signals from the amplifiers before detecting DC voltage (col. 3, lines 6-15)". The examiner respectfully submits that muting, as it is worded in the pertinent claim language, does not obviate the reliance upon the reference of Aoki in view of Grosjean in the rejection of Claim 9. The muting of the signals according to the 'manner as recited in Claim 9' pertains to the language of the limitation "wherein the control circuit detects the DC offset the input signal is muted". This limitation recites a functional aspect or limitation of the control circuit. Claim 9 is directed to an apparatus. Accordingly, such a functional recitation of the features of the apparatus is permissible per MPEP 2114. However, said claim must be distinguished from the prior art in terms of structure rather than function. In the present case, the structure of Aoki in view of Grosjean meets this functionally claimed limitation. Specifically, the detection and protection circuit (17), which detect DC offset - when taken in view of the DC detection circuit of Aoki, remains connected to the input of the loudspeakers (again, taken in view of the connection of amplifiers to loudspeakers in the system of Aoki), irregardless of the electrical

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signals supplied to the circuit (17). The physical connection (of 29 via 33) is not changed in response to modifications to the amplifier inputs (via 7,19) and, in this context, implicitly would not change due to modifications of the electrical application or nature of an input signal. This physical connection, in view of the analogous function of Aoki, enables the detection and protection provided by the underlying circuits of 17 in GrosJean to detect the DC signal. The system of GrosJean evidences an underlying structure and the corresponding concept that a connection, purposed for DC value detection, would remain connected in the context of changes in the electrical signals applied to such a system. Such shunting by 29, as noted by the applicant does not change such connection or detection. It is noted that the applicant's argument even notes such "detecting DC voltage" in the presence of such shunting. Muting affects a characteristic of the input signal. The present claim language of Claim 9 does not require means for muting; only a controller structure able to respond/function accordingly to the effects of any such processing, is required to meet the limitations of Claim 9. As the controller structure would enable it to yet detect or establish a DC signal at junction 29, the underlying structure of at least Aoki in view of GrosJean would meet the structure described by the functional language of "when the input signal is muted".

On page 3, lines 8-9, the applicant has stated, "speakers from damage, while the circuit disclosed in Aoki is a compensation circuit". The examiner respectfully disagrees with the position that

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there is no common concept between the two references. Both applications concern amplifiers, loudspeakers, and responses to a detected level of direct current, even in the manner of response is not identical between the two references.

On page 3, lines 11-12, the applicant has stated, "neither reference discloses muting of an input signal in a manner as recited in the claim 9". The examiner respectfully submits, as further detailed above, that the limitations of Claim 9 do not recite a manner of muting. Rather, they recite limitations pertaining the control structure or circuit that would be responsive to any such muting. As the structure of Aoki in view of GrosJean meets the structural requirements of any such muting (the controller maintains connection at 29), the relevant functional limitation is addressed by the rejection of the final office action, made in view of the teachings of Aoki and GrosJean.

On page 3, lines 18-21, the applicant has stated, "Since any positive or negative offset voltage is already eliminated by the circuit of Aoki, Applicant submits that there is no motivation or need to provide the circuit of Aoki with the contact arms 19 of Grosjean. The examiner respectfully disagrees. As stated in the final office action, the system of Aoki relies upon the proper operation of amplifiers, such as in 11, 12, or 13, to compensate for the DC offset (see, for example, col. 7, lines 59-68 and col. 8, lines 1-6, wherein 16 of amplifier 11 and amplifier 13 by virtue of V29 are involved). GrosJean teaches that DC-based problems occur when transistors in

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amplifiers fail (col. 1, lines 9-11). Such potential amplifiers would include the amplifiers that Aoki relies on for compensation.

GrosJean, however, is able to handle situations in which a transistor in a power amplifier fails, wherein the failure causes DC current to appear at the loudspeaker (col. 1, lines 10-18 and 60-68).

Accordingly, the DC response and circuitry of GrosJean is not redundant or obviated by the teachings of Aoki, as such circuitry covers different sources of DC faults or errors. This response also applies to the applicant's arguments presented on page 4, lines 11-15.

On page 5, lines 1-2 and 5-8, the applicant has stated, "Grosjean fails to teach or suggest how long the contact arms 19 remain open, such that the reference also fails to teach or suggest the claimed 'predetermined length of time' and "Applicant submits, however, that a determination of a period of time based on values of resistance or capacitance, which can vary, fails to teach or suggest the claimed 'predetermined period' of time". The examiner respectfully disagrees. The language of "predetermined" does not provide a context for the nature of the "determining" or a particular length ("how long") of time. As such, the determination of any period of time based on definite values of resistances and capacitances, which in a physical implementation are necessarily established and implemented prior to the operation of the circuit (and thus, prior to the 'any period of time') meet the pertinent claim language. Alternately stated, the values for the resistances and capacitances, which are determined for a physical implementation of the system and thus


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determined prior to the length of muting time (which is a product of the operation of the circuit), mute an input signal for at least a non-zero length of time, which meets one interpretation "for a predetermined length of time". The values and interconnections of the circuit components effect the "maintaining" of such control, and thus the implementation of such values prior to operation establishes this maintaining for at least "a predetermined length of time". The current claim language does not provide further details about the muting or any other length of time, such as that the "predetermined length of time", for example, is the only length of time during which the signal is muted or, alternatively stated, that the muting ends after the predetermined length of time.

On page 6, lines 6-7, the applicant has stated, "However, the circuit of Trump has no relation with a BTL amplifier. The Trump circuit is addressed to protect a speaker when an unusual input is fed to the amplifier. Thus, the circuit of Trump is quite different from the present invention". The examiner respectfully submits, however, that 'unusual inputs' may be applied to BTL amplifiers, as evidenced by at least the applicant's admitted prior art (page 1, lines 21-26, for example). As such, the teachings of Trump, in view of the applicant's interpretation of such teachings, are not obviated from application to the other references applied in the rejection, nor from reading on limitations of the pending claims.

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The applicant has also referred to arguments in the response of January 12, 2004. The corresponding responses in the final rejection to said arguments have been reviewed and are hereby maintained in regards to said arguments.



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